ABSTRACT

An optical/ electrical conversion element used for a photosensor or a solar battery. An optical/ electrical conversion layer, composed of an assembly of a light-absorbing dendrimer structure (1), operating as an electron donor, and fine metal particles (2), operating as an electron receptor, are self-collectively formed by imparting chemical affinity to the dendrimer structure and to the fine metal particles. With the present optical/ electrical conversion element, in which the light-absorbing substance has a dendrimer structure, the electrons, excited on light absorption, migrate over a long distance via molecular chain to get to the fine metal particles (2) operating as an electron receptor. The electrons are routed quickly to outside as current via contact among the fine metal particles and/or between the fine metal particles and an electrode.